



Irish Primary PE Association

Cumann Corpoideachais Bunscoile na hÉireann

Speed

Speed is moving the whole body or part of the body very quickly in a short time. It is improving maximum velocity. Speed running is referred to as sprinting. It is a valuable aspect of being successful in any sport. Every individual is born with a certain percentage of fast twitch (*fast*) and slow twitch (*endurance*) muscle fibres. Maximizing a person's fast twitch potential is the objective of speed development.

Children enjoy the sensation of running fast. The first few metres involve covering the ground efficiently and economically and then opening the stride length followed by increasing stride frequency to cover a longer distance.

Key Points to remember when developing speed in Physical Education programmes:

- Young children should experience sprinting through fun activities and games
- When using sprint runs and shuttle relays good recovery is needed to develop speed
- Emphasis should be placed on fast reactions to for example a whistle start
- Keep distances short (See PE Curriculum (1999) for distance guidelines)
- Children need to experience the feeling of acceleration (*gaining speed*) following the start of a sprint
- Children should then experience maintaining this speed, it should then not be impossible to go faster.

The act of acceleration takes the body from a static position to motion in a fraction of a second. Muscles actually lengthen and then shorten instantaneously. Reaction time is the time it takes for the brain to receive and respond to a stimulus by sending a message to the muscle causing it to contract.

Integrating quickness activities throughout the school year by using fast feet and reaction type activities will result in the muscles having increased 'firing' rates. If these motor skills have been developed through early repetition they become engrained on the muscle memory and will serve the children for years to come. The brain stores this information and eventually the 'planning' of movements becomes instinctive leading to the *atomisation of skills*.

It is good practice to show the children how to stretch after each run. Increasing flexibility increases how fast their legs can move. Make the activities fun.

Useful Links and Ideas

Sprinting activities and games can be included in a number of strands of the Physical Education programme.

Encourage the children to run fast like their favourite animal. Tell them to imagine running like a cheetah or a dog. Or use other visualisation images such as running on a hot floor to help children understand how to get faster.

The following suggestions are taken from: Center for Children's Running

http://childrensrunning.org/BEST_RUNS.html

Three-Person Relays 10-20 m

Have children run simple relays with two runners starting at point A and one at point B. The first runner at point A runs to point B and tags the runner who then runs back to point A and tags the third runner. Let them go back and forth with each child running three-four times to start with

Children's Pentathlon

Host a Pentathlon (a five-event competition), which has three running events and two field events. There are five stations. Once a child completes one, they move to the next. Children time/measure each other separately (*peer assessment*) and record their time or distance on a small card that the children carry with them. Don't worry about scoring the events; just finishing and having a record of how they did in each event will be reward enough.

Get Fast, Get Strong Obstacle Course

Obstacle courses work great in a children's running program. Set up more than two courses so you can give choice to the children. Also, make one course for the older children longer in terms of the number of obstacles and the distance they run before and after they engage the first and last obstacle. Have the children running hills if possible in your school grounds, flipping tires, zigzagging around cones, climbing monkey bars, and anything else you can think of.

Scavenger Run

Remember, children love games, so include running games where not just one child, but every child will win. A running version of a scavenger hunt is always popular. Make maps of the school field/yard, a local park or playground where the run is going to take place. Put the children in small groups to start the run. Have each group run to a different landmark shown on the map. They must bring back to the teacher one of whatever they find there before they can go to another landmark shown on the map.

Explosive Speed games: http://www.youtube.com/watch?v=Je_W8TT20jU